

IN THE CLAIMS

This listing of claims replaces all prior listings:

1. (currently amended) A ~~manufacturing method of~~ manufacturing carbon nanotubes ~~for producing carbon nanotubes starting with a catalyst comprising the steps of:~~

~~, wherein the catalyst is arranged~~ arranging a catalyst on ~~[[the]] an~~ inner face of a first electrode having a hollow~~[[,]]~~;

arranging a second electrode is arranged so that an end thereof is positioned inside the hollow of the first electrode~~[[,]]~~; and

generating arc discharge is generated between the first electrode and the second electrode in a depressurized atmosphere including only inert gas to produce double-walled carbon nanotubes.

2-4. (canceled)

5. (currently amended) A ~~manufacturing method of carbon nanotubes according to~~ The method of claim ~~[[4]]~~ 1, wherein the arc discharge is ~~performed~~ generated in the depressurized atmosphere of helium gas, nitrogen gas, or argon gas.

6. (currently amended) A ~~manufacturing method of carbon nanotubes according to~~ The method of claim 1, wherein the first electrode is a bowl-like electrode and the second electrode is a rod-like electrode.

7. (currently amended) A ~~manufacturing method of carbon nanotubes according to~~ The method of claim 1, wherein while the arc discharge is generated between the first electrode and the second electrode, the double-walled carbon nanotubes are continuously produced.

8. (withdrawn) Carbon nanotube manufacturing equipment comprising:

a vacuum chamber having a first electrode in which a hollow is included and a catalyst is arranged on the inner face, and a second electrode arranged so that an end thereof is positioned inside the hollow of the first electrode;

a gas introducing means for introducing inert gas into the vacuum chamber; and

a voltage application means for applying a given voltage between the first electrode and the second electrode to generate arc discharge.

9. (withdrawn) Carbon nanotube manufacturing equipment according to claim 8, wherein the inert gas is helium, nitrogen, or argon gas.

10. (withdrawn) Carbon nanotube manufacturing equipment according to claim 9, wherein the first electrode is a bowl-like electrode.

11. (withdrawn) Carbon nanotube manufacturing equipment according to claim 8 comprising a recovery means for recovering carbon nanotubes to be produced.

12. (withdrawn) A carbon nanotube being from 1 μm to 1 mm long.

13. (withdrawn) A carbon nanotube being from 1 mm to 1 cm long.

14. (withdrawn) A carbon nanotube being from 1 cm to 1 m long.

15. (withdrawn) A carbon nanotube being from 1 m to 1 km long..